A M E N D M E N T S   T O   T H E   C L A I M S

1.   (CURRENTLY AMENDED) A method comprising:

receiving order information based on an order of a customer; ~~and~~

determining an offer for the customer based on:

>   a round-up amount and

>   at least one of

>>   a genetic program and

>>   a genetic algorithm; and

outputting an indication of the determined offer.

2 – 5. (CANCELLED)

6.   (ORIGINAL) A device, comprising:

a processor; and

a storage device coupled to the processor and storing instructions adapted to be executed by said processor to perform the method of claim 1.

7.   (PREVIOUSLY PRESENTED) A medium storing instructions adapted to be executed by a processor to perform the method of claim 1.

8.   (CANCELLED)

9.   (CURRENTLY AMENDED) A method comprising:

receiving order information based on an order of a customer;

determining a transaction total based on the order information;

calculating a difference between the transaction total and a next highest

dollar amount greater than the transaction total; ~~and~~

determining an offer for the customer based on:

the difference and

at least one of

a genetic program and

a genetic algorithm; and

outputting an indication of the determined offer.

10.   (CANCELLED)

11.   (PREVIOUSLY PRESENTED) The method of claim 9, further comprising:

determining an amount of sales tax associated with the transaction; and

in which determining the offer for the customer is further based on the amount of sales tax.

12.   (PREVIOUSLY PRESENTED) The method of claim 1, further comprising:

displaying the offer on a display.

13.   (CURRENTLY AMENDED) The method of claim 1, further comprising:

determining a transaction total based on the order information;

~~providing the offer to the customer;~~

receiving an indication of acceptance of the offer;

generating new order information representing at least one additional product being added to the order information; ~~and~~

determining a new transaction total based on the new order information<u>; and</u>

<u>outputting an indication of the new transaction total,</u>

<u>in which outputting an indication of the offer comprises:</u>

<u>providing the offer to the customer.</u>

14.   (PREVIOUSLY PRESENTED) The method of claim 1,

in which determining an offer for the customer is further based on:

historical offer criteria.

15.   (PREVIOUSLY PRESENTED) The method of claim 1, further comprising:

generating a plurality of genetic programs, in which each genetic program is given an opportunity to generate at least one respective offer.

16.   (PREVIOUSLY PRESENTED) The method of claim 15, further comprising:

selecting at least one of the plurality of genetic programs at random to generate a respective offer.

17.   (PREVIOUSLY PRESENTED) The method of claim 1, further comprising:

generating a base set of rules based on historical order information;

creating new rules based on:

the base set of rules, and

additional historical information; and

optimizing the new rules based on experience from orders.

18.   (PREVIOUSLY PRESENTED) The method of claim 1, in which determining the offer comprises:

determining a respective score for each of a plurality of potential offers.

19.   (PREVIOUSLY PRESENTED) The method of claim 1, further comprising:

determining a first plurality of genetic programs;

determining a respective fitness of each genetic program of the plurality of genetic programs; and

determining a second plurality of genetic programs based on the first plurality of genetic programs and its respective fitness.

20.   (PREVIOUSLY PRESENTED) The method of claim 19, in which determining the second plurality of genetic programs comprises:

modifying at least one genetic program of the first plurality of genetic programs.

21.   (PREVIOUSLY PRESENTED) The method of claim 19, in which determining the second plurality of genetic programs comprises:

generating at least one new genetic program using a crossover process.

22.   (PREVIOUSLY PRESENTED) The method of claim 19, in which determining the second plurality of genetic programs comprises:

generating at least one new genetic program using a replication process.

23.   (PREVIOUSLY PRESENTED) The method of claim 19, in which determining the second plurality of genetic programs comprises:

generating at least one new genetic program using a mutation process.

24.   (CURRENTLY AMENDED) The method of claim 1,

in which the customer is at a retail store; and

~~further comprising:~~

in which outputting an indication of the offer comprises:

displaying the offer to the customer via a display at the retail store.

25.   (PREVIOUSLY PRESENTED) The method of claim 18, in which the retail store comprises a quick service restaurant.

26.   (PREVIOUSLY PRESENTED) The method of claim 18, in which the offer comprises an offer for at least one food item.

27.   (NEW) A method of using at least one of a genetic program or a genetic algorithm in generating an offer, the method comprising:

receiving order information based on an order of a customer;

translating the order information to a bit stream; and

generating an offer for the customer based on at least one of a genetic program or a genetic algorithm, in which the at least one of a genetic program or a genetic algorithm comprises:

matching the bit stream to one or more classifiers of a population of classifiers,

each classifier of the population of classifiers comprising a condition and an action to perform if the condition is met;

determining one or more expected rewards for each matching

classifier; and

selecting a given classifier to make the offer,

the given classifier comprising a given action; and

outputting the generated offer.

28.   (NEW) The method as recited in claim 27, further comprising:

determining that a minimum number of classifiers of the population of

classifiers has not been matched;

generating one or more additional classifiers; and

adding the additional classifiers to the population of classifiers, in response

to determining that the minimum number of classifiers has not been matched.

29.   (NEW) The method as recited in claim 28, in which said additional

classifiers are generated through at least one of crossovers of existing classifiers or

mutations of existing classifiers.

30.   (NEW) The method as recited in claim 27, further comprising

determining whether to perform an exploit operation or an explore operation in

selecting a classifier to make an offer.

31.   (NEW) The method as recited in claim 30, in which in response to

determining that an explore operation is to be performed, the given classifier is

selected at random.

32.   (NEW) The method as recited in claim 30, in which in response to determining that an exploit operation is to be performed, the given classifier is associated with an expected reward of maximized profit.

33.   (NEW) The method as recited in claim 27, in which the bit stream and each classifier of the population of classifiers is a uniform length.

34.   (NEW) A method for using a self activating offer generation system, the method comprising:

    initializing an offer generation system, the offer generation system comprising at least one of a genetic algorithm or a genetic program to generate offers;

    establishing a threshold criteria for activation of the offer generation system;

    running the offer generation system as a background process in a given environment, whereby the offer generation system is trained to make offers in the given environment; and

    the offer generation system automatically self activating, in response to detecting the threshold criteria is met.

35.   (NEW) A method for applying a trained offer generation system, the method comprising:

applying an offer generation system within a first environment;

training the offer generation system within the first environment to create a trained offer generation system which is optimized for use in the first environment;

analyzing the first environment to identify particular characteristics;

identifying a second environment which has characteristics similar to the particular characteristics; and

applying the trained offer generation system to the identified second environment.